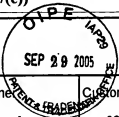


<b>TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT</b> (Under 37 CFR 1.97(b) or 1.97(c))				Docket No. 19059	
In Re Application Of: Jose Repolles Moliner, et al.					
					
Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/544,237	August 2, 2005	Unassigned	23389	Unassigned	Unassigned
<b>Title:</b> <b>DISULFIDE, SULFIDE, SULFOXIDE, AND SULFONE DERIVATIVES OF CYCLIC SUGARS AND USES THEREOF</b>					
<p>Address to:  <b>Commissioner for Patents</b>  <b>P.O. Box 1450</b>  <b>Alexandria, VA 22313-1450</b></p> <p><b>37 CFR 1.97(b)</b></p> <p>1. <input checked="" type="checkbox"/> The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.</p> <p style="text-align: center;"><b>37 CFR 1.97(c)</b></p> <p>2. <input type="checkbox"/> The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:</p> <p style="margin-left: 40px;"><input type="checkbox"/> the statement specified in 37 CFR 1.97(e);</p> <p style="text-align: center;"><b>OR</b></p> <p style="margin-left: 40px;"><input type="checkbox"/> the fee set forth in 37 CFR 1.17(p).</p>					

# TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
19059

In Re Application of: Jose Repolles Moliner, et al.



Application No. 10/544,237	Filing Date August 2, 2005	Examiner Unassigned	Customer No. 23389	Group Art Unit Unassigned	Confirmation No. Unassigned
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Title:

**DISULFIDE, SULFIDE, SULFOXIDE, AND SULFONE DERIVATIVES OF CYCLIC SUGARS AND USES THEREOF**

## Payment of Fee

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

- ☐ A check in the amount of \_\_\_\_\_ is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. 19-1013/SSMP as described below.
- ☐ Charge the amount of \_\_\_\_\_
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- ☒ Charge any additional fee required.
- ☐ Payment by credit card. Form PTO-2038 is attached.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

## Certificate of Transmission by Facsimile\*

I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Patent and Trademark Office (Fax No. \_\_\_\_\_) on \_\_\_\_\_ (Date) \_\_\_\_\_ Signature \_\_\_\_\_  
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Frank S. DiGiglio  
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*Signature*

Dated: September 27, 2005

Frank S. DiGiglio  
Registration No. 31,346  
Scully, Scott, Murphy & Presser  
400 Garden City Plaza, Suite 300  
Garden City, New York 11530  
516-742-4343

CC:



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Applicants:** Jose Repolles Moliner, et al.

**Examiner:** Unassigned

**Serial No:** 10/544,237

**Art Unit:** Unassigned

**Filed:** August 2, 2005

**Docket:** 19059

**For:** DISULFIDE, SULFIDE, SULFOXIDE,  
AND SULFONE DERIVATIVES OF  
CYCLIC SUGARS AND USES THEREOF

**Dated:** September 27, 2005

Mail Stop Amendment  
Commissioner for Patents  
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Sir:

**INFORMATION DISCLOSURE STATEMENT**

In accordance with 37 C.F.R. §§ 1.97 and 1.98, it is requested that the following references, which are also listed on the attached Form PTO-1449, be made of record in the above-identified case.


1. French Patent Publication No. 2 134 698, published December 8, 1972;
2. Shore B. et al., "Rabbits as a Model for the Study of Hyperlipoproteinemia and Atherosclerosis", *Day CE (ed) Atherosclerosis Drug Discovery* 123-141 (1976);
3. De Lucchi O., "Chemoselective Reduction of Isosorbide-2,5-Dinitrate", *Gazzetta Chimica Italiana, Societa Chimica*, 117(3):173-176 (1987), XP-000984806;

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**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**


I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

Dated: September 27, 2005

  
Frank S. DiGiglio

4. European Patent Publication No. 0 290 885, published November 17, 1988;
5. Kurz K.D. et al., "Rat Model of Arterial Thrombosis Induced by Ferric Chloride", *Thrombosis Research*, 60(4):269-280 (1990);
6. Stephan Z.F. et al., "Rapid Fluorometric Assay of LDL Receptor Activity by Dil-Labeled LDL", *Journal of Lipid Research*, 34:325-330 (1993);
7. European Patent Publication No. 0 530 887 A1, published March 10, 1993;
8. Salas E. et al., "Endothelium-Independent Relaxation by 17- $\alpha$ -Estradiol of Pig Coronary Arteries", *European Journal of Pharmacology*, 258:47-55 (1994);
9. Trongvanichnam K. et al., "Effects of Chronic Oral Administration of Isosorbide Dinitrate on In Vitro Contractility of Rat Arterial Smooth Muscle", *Jpn. J. Pharmacol.*, 71:167-173 (1996);
10. Caveda L. et al., "Inhibition of Cultured Cell Growth by Vascular Endothelial Cadherin (Cadherin-5/VE-Cadherin)", *J. Clin. Invest.*, 98(4):886-893 (1996);
11. Del Maschio A. et al., "Polymorphonuclear Leukocyte Adhesion Triggers the Disorganization of Endothelial Cell-to-Cell Adherens Junctions", *The Journal of Cell Biology*, 135(2):497-510 (1996);
12. Furchgott R., "Bioassays with Isolated Vascular Tissue for Endothelium-Derived Relaxing Factor, Nitric Oxide and Nitric Oxide Donors", *Feelisch & Stamler, eds., John Wiley & Sons*, pp. 567-581 (1996);
13. Nallet J.P. et al., "Synthesis of a Series of Hexitol and Aminodeoxyhexitol Mononitrate Derivatives Containing a Sulfur Group and Pharmacological Evaluation on Isolated Rat Aortas", *Eur. J. Org. Chem.*, 933-943 (1998);
14. Hirata Y. et al., "Effect of JTV-506, a Novel Vasodilator, on Experimental Angina Model in Rats", *Journal of Cardiovascular Pharmacology*, 31(2):322-326 (1998);
15. Spranger T. et al., "How Different Constituents of Human Plasma and Low Density Lipoprotein Determine Plasma Oxidizability by Copper", *Chemistry and Physics of Lipids*, 91:39-52 (1998);
16. Feuerstein G.Z. et al., "Antithrombotic Efficacy of a Novel Murine Antihuman Factor IX Antibody in Rats", *Arterioscler Thromb Vasc Biol.*, 19:2554-2562 (1999);
17. Bombeli T. et al., "Endothelial Cells Undergoing Apoptosis Become Proadhesive for Nonactivated Platelets", *Blood*, 93(11):3831-3838 (1999);

/N.C./

- 
18. Martín-Satué M. et al., "Overexpression of  $\alpha(1,3)$ -Fucosyltransferase VII is Sufficient for the Acquisition of Lung Colonization Phenotype in Human Lung Adenocarcinoma HAL-24Luc Cells", *British Journal of Cancer*, 80(8):1169-1174 (1999);
19. PCT International Publication No. WO 00/20420, published April 13, 2000;
20. Lynch S.M. et al., "Plasma Thiols Inhibit Hemin-Dependent Oxidation of Human Low-Density Lipoprotein", *Biochimica et Biophysica Acta*, 1485:11-22 (2000);
21. Pedreño J. et al., "Molecular Requirements in the Recognition of Low-Density Lipoproteins (LDL) by Specific Platelet Membrane Receptors", *Thrombosis Research*, 99:51-60 (2000);
22. Colomé C. et al., "Small Oxidative Changes in Atherogenic LDL Concentrations Irreversibly Regulate Adhesiveness of Human Endothelial Cells: Effect of the Lazaroid U74500A", *Atherosclerosis*, 149:295-302 (2000); and
23. Pedreño J. et al., "Low-Density Lipoprotein (LDL) Binds to a G-Protein Coupled Receptor in Human Platelets, Evidence that the Proaggregatory Effect Induced by LDL is Modulated by Down-Regulation of Binding Sites and Desensitization of its Mediated Signaling", *Atherosclerosis*, 155:99-112 (2001).

/N.C./

Reference nos. 1, 3, 4, 7, 13 and 19 were cited in a Search Report dated February

3, 2005 received from the European Patent Office. Applicants are submitting copies of the above-cited references, together with a copy of the Search Report. The relevance of above-identified reference nos. 1, 3, 4, 7 and 13 has been described in the Search Report. The relevance of above-identified reference nos. 2, 5, 6, 8-12, 14-23 has been described in the specification.

Inasmuch as this Information Disclosure Statement is being submitted in accordance with the schedule set out in 37 C.F.R. § 1.97(b), no statement or fee is required.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'F. DiGiglio'.

Frank S. DiGiglio

Registration No.: 31,346

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400 Garden City Plaza, Suite 300  
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FSD:dg

Form PTO-1449  
(REV. 7-82)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE**LIST OF PRIOR ART  
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(Use several sheets if necessary)

**Atty. Docket No. (Optional)**

19059

**Application Number**

10/544,237

**Applicant(s)**

Jose Repolles Moliner, et al.

**Filing Date**

August 2, 2005

**Group Art Unit**

Unassigned

**FOREIGN PATENT DOCUMENTS**

REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

Caveda L. et al., "Inhibition of Cultured Cell Growth by Vascular Endothelial Cadherin (Cadherin-5/VE-Cadherin)", *J. Clin. Invest.*, 98(4):886-893 (1996)

Del Maschio A. et al., "Polymorphonuclear Leukocyte Adhesion Triggers the Disorganization of Endothelial Cell-to-Cell Adherens Junctions", *The Journal of Cell Biology*, 135(2):497-510 (1996)

Furchgott R., "Bioassays with Isolated Vascular Tissue for Endothelium-Derived Relaxing Factor, Nitric Oxide and Nitric Oxide Donors", *Feelisch & Stamler, eds., John Wiley & Sons*, pp. 567-581 (1996)

Nallet J.P. et al., "Synthesis of a Series of Hexitol and Aminodeoxyhexitol Mononitrate Derivatives Containing a Sulfur Group and Pharmacological Evaluation on Isolated Rat Aortas", *Eur. J. Org. Chem.*, 933-943 (1998)

Hirata Y. et al., "Effect of JTV-506, a Novel Vasodilator, on Experimental Angina Model in Rats", *Journal of Cardiovascular Pharmacology*, 31(2):322-326 (1998)

Spranger T. et al., "How Different Constituents of Human Plasma and Low Density Lipoprotein Determine Plasma Oxidizability by Copper", *Chemistry and Physics of Lipids*, 91:39-52 (1998)

Feuerstein G.Z. et al., "Antithrombotic Efficacy of a Novel Murine Antihuman Factor IX Antibody in Rats", *Arterioscler Thromb Vasc Biol.*, 19:2554-2562 (1999)

**EXAMINER****DATE CONSIDERED**

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449  
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PATENT AND TRADEMARK OFFICE**LIST OF PRIOR ART  
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Atty. Docket No. (Optional)

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**FOREIGN PATENT DOCUMENTS**

REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	2 134 698	12/8/72	France				
	0 290 885	11/17/88	EPO				
	0 530 887 A1	3/10/93	EPO				
	WO 00/20420	4/13/00	PCT				

**OTHER DOCUMENTS** *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	Shore B. et al., "Rabbits as a Model for the Study of Hyperlipoproteinemia and Atherosclerosis", <i>Day CE (ed) Atherosclerosis Drug Discovery</i> 123-141 (1976)
	De Lucchi O., "Chemoselective Reduction of Isosorbide-2,5-Dinitrate", <i>Gazzetta Chimica Italiana, Societa Chimica</i> , 117(3):173-176 (1987), XP-000984806
	Kurz K.D. et al., "Rat Model of Arterial Thrombosis Induced by Ferric Chloride", <i>Thrombosis Research</i> , 60(4):269-280 (1990)
	Stephan Z.F. et al., "Rapid Fluorometric Assay of LDL Receptor Activity by Dil-Labeled LDL", <i>Journal of Lipid Research</i> , 34:325-330 (1993)
	Salas E. et al., "Endothelium-Independent Relaxation by 17- $\alpha$ -Estradiol of Pig Coronary Arteries", <i>European Journal of Pharmacology</i> , 258:47-55 (1994)
	Trongvanichnam K. et al., "Effects of Chronic Oral Administration of Isosorbide Dinitrate on In Vitro Contractility of Rat Arterial Smooth Muscle", <i>Jpn. J. Pharmacol.</i> , 71:167-173 (1996)

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**Atty. Docket No. (Optional)**

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						YES	NO

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	Bombeli T. et al., "Endothelial Cells Undergoing Apoptosis Become Proadhesive for Nonactivated Platelets", <i>Blood</i> , 93(11):3831-3838 (1999)
	Martín-Satué M. et al., "Overexpression of $\alpha(1,3)$ -Fucosyltransferase VII is Sufficient for the Acquisition of Lung Colonization Phenotype in Human Lung Adenocarcinoma HAL-24Luc Cells", <i>British Journal of Cancer</i> , 80(8):1169-1174 (1999)
	Lynch S.M. et al., "Plasma Thiols Inhibit Hemin-Dependent Oxidation of Human Low-Density Lipoprotein", <i>Biochimica et Biophysica Acta</i> , 1485:11-22 (2000)
	Pedreño J. et al., "Molecular Requirements in the Recognition of Low-Density Lipoproteins (LDL) by Specific Platelet Membrane Receptors", <i>Thrombosis Research</i> , 99:51-60 (2000)
	Colomé C. et al., "Small Oxidative Changes in Atherogenic LDL Concentrations Irreversibly Regulate Adhesiveness of Human Endothelial Cells: Effect of the Lazaroid U74500A", <i>Atherosclerosis</i> , 149:295-302 (2000)
	Pedreño J. et al., "Low-Density Lipoprotein (LDL) Binds to a G-Protein Coupled Receptor in Human Platelets, Evidence that the Proaggregatory Effect Induced by LDL is Modulated by Down-Regulation of Binding Sites and Desensitization of its Mediated Signaling", <i>Atherosclerosis</i> , 155:99-112 (2001)

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